

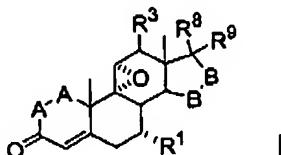
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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

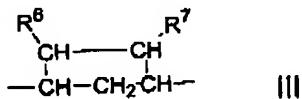
Claims 1-65. (cancelled).

Claim 66. (currently amended) A process for the formation of a compound of Formula I:



wherein -A-A- represents the group -CHR⁴-CHR⁵- or -CR⁴=CR⁵-;

-B-B- represents the group -CHR⁶-CHR⁷- or an alpha- or beta-oriented group of Formula III:



R¹ represents an α -oriented lower alkoxy carbonyl or hydroxycarbonyl radical;

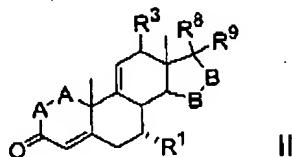
R³, R⁴ and R⁵ are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxy carbonyl, cyano, and aryloxy;

R⁶ and R⁷ are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano, and aryloxy; and

R⁸ and R⁹ are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonylalkyl, alkoxy carbonylalkyl, acyloxyalkyl, cyano, and aryloxy, or R⁸ and R⁹ together comprise a carbocyclic or heterocyclic ring structure, or R⁸ or R⁹ together with R⁶ or R⁷ comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

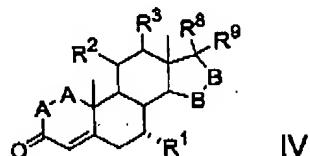
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the process comprising epoxidizing converting a compound of Formula II to a compound of Formula I, said compound of Formula II having the structure:



wherein -A-A-, -B-B-, R¹, R³, R⁸ and R⁹ are as defined above;

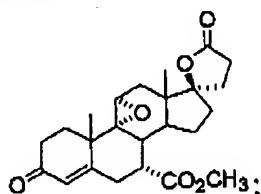
wherein preparation of said compound of Formula II comprises is prepared by eliminating a leaving group from converting a compound of Formula IV to a compound of Formula II, said compound of Formula IV having the structure:



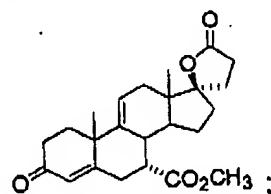
wherein -A-A-, -B-B-, R¹, R³, R⁸ and R⁹ are as defined above, and R² is a leaving group the abstraction of which is effective for generating a double bond between the 9- and 11-carbon atoms.

Claim 67. (cancelled)

Claim 68. (previously presented) A process as set forth in claim 66 wherein said compound of Formula I is:

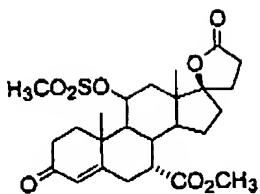


said compound of Formula II is:

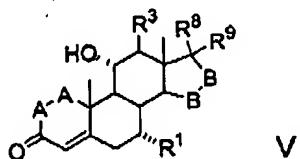


and said compound of Formula IV is:

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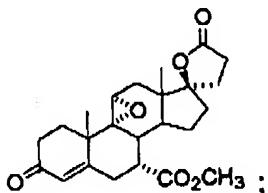
Claim 69. (currently amended) A process as set forth in claim 66 wherein preparation of the compound of Formula IV comprises is prepared by esterifying or halogenating converting a compound of Formula V to a compound of Formula IV, said compound of Formula V having the structure:



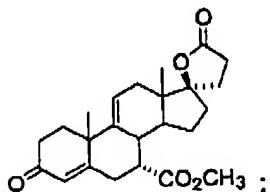
wherein -A-A-, -B-B-, R¹, R³, R⁸ and R⁹ are as defined in claim 66.

Claims 70. -71. (cancelled)

Claim 72. (previously presented) The process of claim 69 wherein said compound of Formula I is:

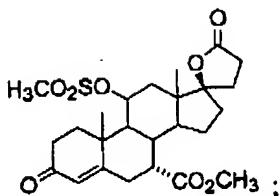


said compound of Formula II is:

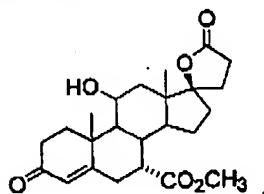


said compound of Formula IV is:

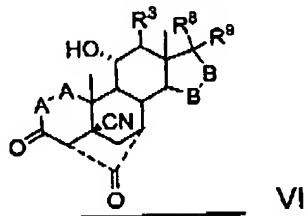
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and said compound of Formula V is:



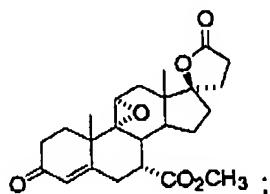
Claim 73. (currently amended) A process as set forth in claim 69 wherein preparation of the compound of Formula V comprises is prepared by reacting converting a compound of Formula VI with a metal alkoxide to a compound of Formula V, said compound of Formula VI having the structure:



wherein -A-A-, -B-B-, R³, R⁸ and R⁹ are as defined in claim 69.

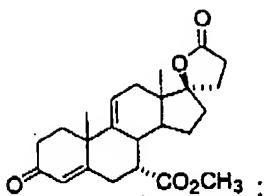
Claim 74. (cancelled)

Claim 75. (currently amended) The process of claim 73 wherein said compound of Formula I is:

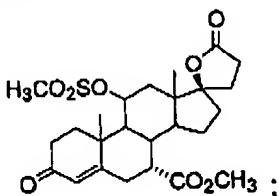


said compound of Formula II is:

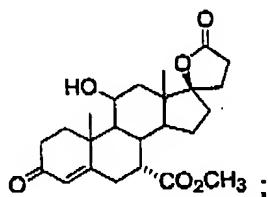
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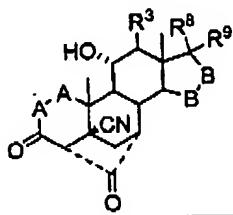
said compound of Formula IV is:



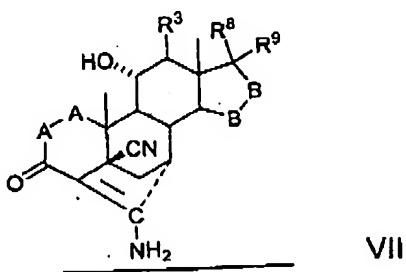
said compound of Formula V is:



and said compound of Formula VI is:



Claim 76. (currently amended) A process as set forth in claim 73 wherein
preparation of the compound of Formula VI is prepared by comprises
hydrolyzing converting a compound of Formula VII to a compound of Formula
VI, said compound of Formula VII having the structure:

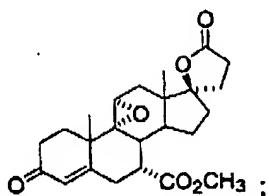


wherein -A-A-, -B-B-, R³, R⁸ and R⁹ are as defined in claim 73.

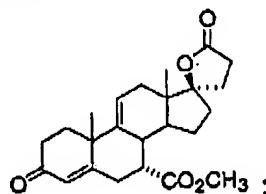
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Claim 77. (cancelled)

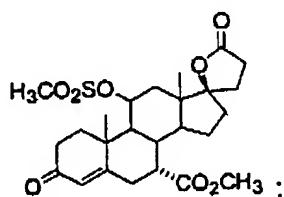
Claim 78. (currently amended) The process of claim 76 wherein said compound of Formula I is:



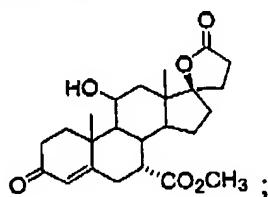
said compound of Formula II is:



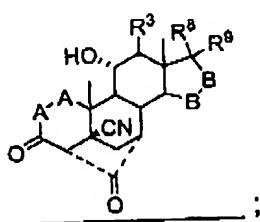
said compound of Formula IV is:



said compound of Formula V is:

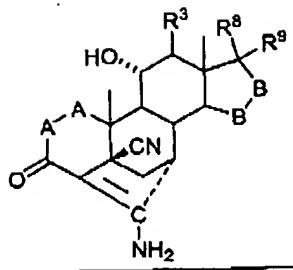


said compound of Formula VI is:

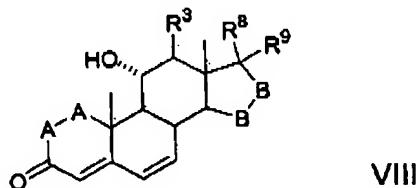


and said compound of Formula VII is:

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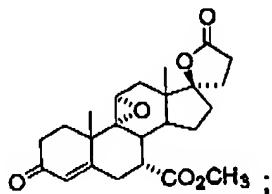
Claim 79. (currently amended) A process as set forth in claim 76 wherein preparation of the compound of Formula VII comprises is prepared by cyanidating converting a compound of Formula VIII to a compound of Formula VII, said compound of Formula VIII having the structure:



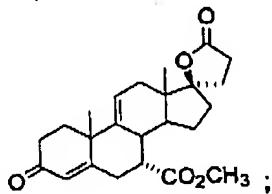
wherein -A-A-, -B-B-, R³, R⁸ and R⁹ are as defined in claim 76.

Claims 80. – 81. (cancelled)

Claim 82. (currently amended) A process as set forth in claim 79 wherein said compound of Formula I is:

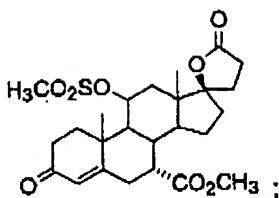


said compound of Formula II is:

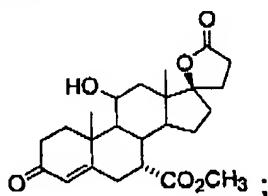


said compound of Formula IV is:

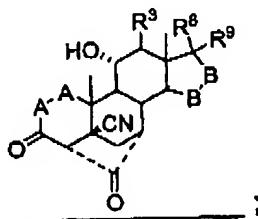
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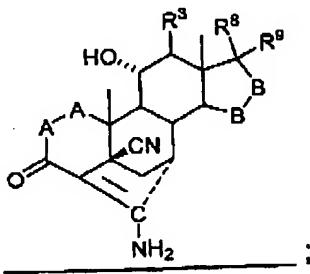
said compound of Formula V is:



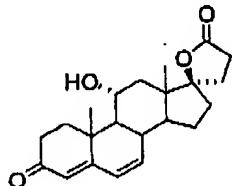
said compound of Formula VI is:



said compound of Formula VII is:

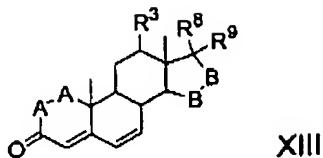


and said compound of Formula VIII is:



Claim 83. (currently amended) A process as set forth in claim 79 wherein preparation of the compound of Formula VIII comprises is prepared by hydroxylating converting a compound of Formula XIII to a compound of Formula VIII, said compound of Formula XIII having the structure:

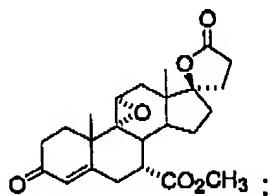
PHA 4199.1(3090/7/US)



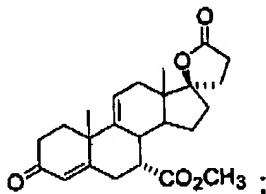
wherein -A-A-, -B-B-, R³, R⁸ and R⁹ are as defined in claim 79.

Claims 84. - 85 (cancelled)

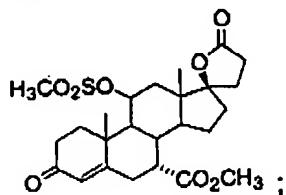
Claim 86. (currently amended) A process as set forth in claim 83 wherein said compound of Formula I is:



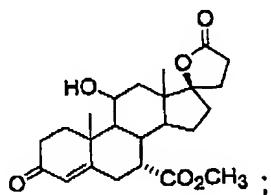
said compound of Formula II is:



said compound of Formula IV is:

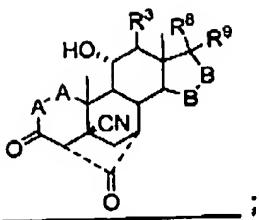


said compound of Formula V is:

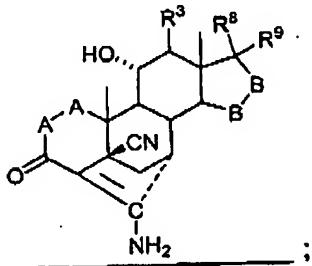


said compound of Formula VI is:

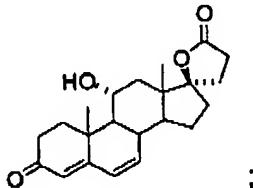
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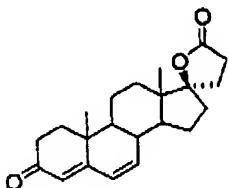
said compound of Formula VII is:



said compound of Formula VIII is:



and said compound of Formula XIII is:



Claims 87. – 93. (cancelled)

Claim 94. (currently amended) A process as set forth in claim 66 wherein said epoxidation conversion of a compound of Formula II to a compound of Formula I is effected by comprises contacting an epoxidizing reagent with a compound of Formula II.

Claim 95. (currently amended) A process as set forth in claim 66 wherein elimination of said leaving group from conversion of a compound of Formula

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~~IV to form a compound of Formula II is effected by comprises~~ removing an 11 α -leaving group from a compound of Formula IV.

Claim 96. (currently amended) A process as set forth in claim 69 wherein ~~said esterification or halogenation conversion of a compound of Formula V to a compound of Formula IV is effected by comprises~~ reacting a lower alkylsulfonylating or acylating reagent or a halide generating agent with a compound of Formula V.

Claim 97. (currently amended) A process as set forth in claim 73 wherein ~~said reaction conversion of a compound of Formula VI with a metal alkoxide to a compound of Formula V is effected by comprises~~ reacting a compound of Formula VI with an alkali metal alkoxide corresponding to the formula $R^{10}OM$ wherein M is alkali metal and $R^{10}O^-$ corresponds to the alkoxy substituent of R^1 .

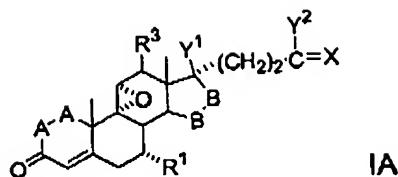
Claim 98. (cancelled) A process as set forth in claim 76 wherein ~~said conversion of a compound of Formula VII to a compound of Formula VI is effected by hydrolyzing a compound of Formula VII.~~

Claim 99. (currently amended) A process as set forth in claim 79 wherein ~~said cyanidation conversion of a compound of Formula VIII to a compound of Formula VII is effected by comprises~~ reacting a source of cyanide ion in the presence of an alkali metal salt with a compound of Formula VIII.

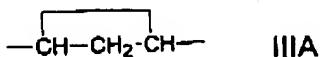
Claim 100. (currently amended) A process as set forth in claim 83 wherein ~~said hydroxylation conversion of a compound of Formula XIII to a compound of Formula VIII is effected by comprises~~ oxidizing a compound of Formula XIII by fermentation in the presence of a microorganism effective for introducing an 11-hydroxy group into said substrate in α -orientation.

Claim 101. (currently amended) A process for the formation of a compound of Formula IA:

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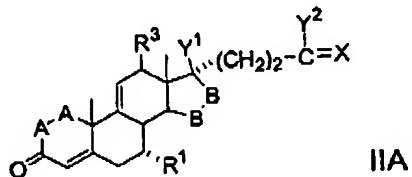


wherein -A-A- represents the group -CH₂-CH₂- or -CH=CH-;
 -B-B- represents the group -CH₂-CH₂- or an alpha- or beta- oriented group
 of Formula IIIA:

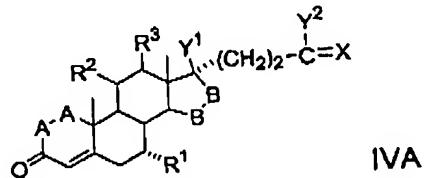


R¹ represents an alpha-oriented lower alkoxy carbonyl radical;
 X represents two hydrogen atoms or oxo;
 Y¹ and Y² together represent the oxygen bridge -O-, or
 Y¹ represents hydroxy, and
 Y² represents hydroxy, lower alkoxy or, if X represents H₂, also lower
 alkanoyloxy;
 and salts of compounds in which X represents oxo and Y² represents
 hydroxy;

the process comprising epoxidizing converting a compound of Formula
 IIA to a compound of Formula IA, said compound of Formula IIA having the
 structure:



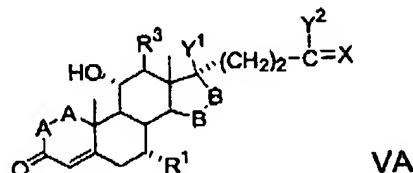
wherein -A-A-, -B-B-, R¹, R³, X, Y¹ and Y² are as defined above;
 wherein formation of said compound of Formula IIA is formed by
comprises eliminating a leaving group from converting a compound of
 Formula IVA to a compound of Formula IIA, said compound of Formula IVA
 having the structure:



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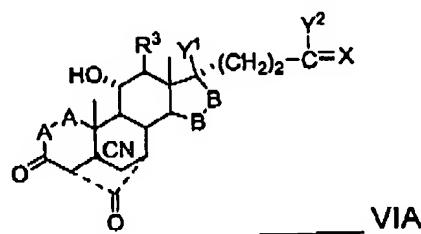
wherein -A-A-, -B-B-, R¹, R³, X, Y¹ and Y² are as defined above, and R² represents lower alkylsulfonyloxy or acyloxy; and

wherein formation of said compound of Formula IVA is formed by comprises esterifying or halogenating converting a compound of Formula VA to a compound of Formula IVA, said compound of Formula VA having the structure:



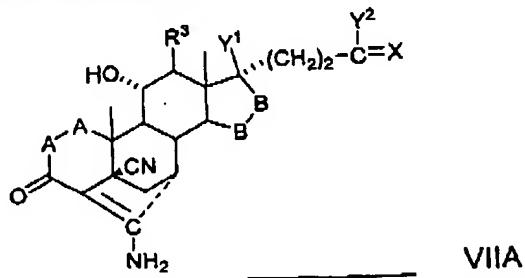
wherein -A-A-, -B-B-, R¹, R³, X, Y¹ and Y² are as defined above;

wherein formation of said compound of Formula VA is formed by comprises reacting converting a compound of Formula VIA with a metal alkoxide to a compound of Formula VA, said compound of Formula VIA having the structure:



wherein -A-A-, -B-B-, R³, X, Y¹ and Y² are as defined above; and

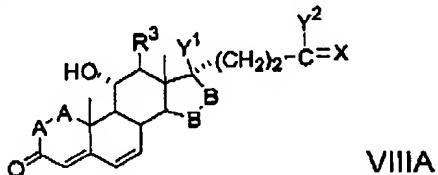
wherein formation of said compound of Formula VIA is formed by comprises hydrolyzing converting a compound of Formula VIIA to a compound of Formula VIA, said compound of Formula VIIA having the structure:



wherein -A-A-, -B-B-, R³, X, Y¹ and Y² are as defined above; and

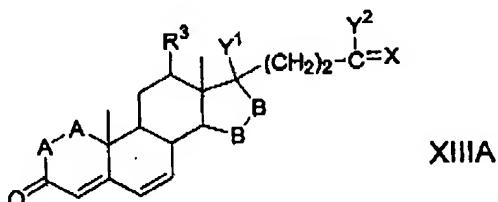
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wherein formation of said compound of Formula VIIA is formed by cyanidating converting a compound of Formula VIII A to form a compound of Formula VIIA, said compound of Formula VIIA having the structure:



wherein -A-A-, -B-B-, R³, X, Y¹ and Y² are as defined above; and

wherein formation of said compound of Formula VIII A is formed by comprises hydroxylating converting a compound of Formula XIII A to form a compound of Formula VIIA, said compound of Formula XIII A having the structure:



wherein -A-A-, -B-B-, R³, X, Y¹ and Y² are as defined above.